

CLAIMS

What is claimed is:

1. A motorcycle comprising:
 - a frame;
 - a rear wheel attached to a driven pulley;
 - a drive pulley rotatably mounted to a rigid bracket, wherein the rigid bracket is attached to the frame such that a relative orientation between the drive pulley and the driven pulley is maintained substantially constant;
 - a drive belt coupling the drive pulley and the driven pulley such that a rotation of the drive pulley imparts a rotation of the driven pulley;
 - a transmission output gear attached to an output of a transmission; and
 - a drive coupler located between, and coupled to both, the transmission output gear and the drive pulley.
2. The motorcycle of claim 1 wherein the drive coupler is fabricated from a resilient compressible material.
3. The motorcycle of claim 2 wherein the resilient compressible material comprises rubber.
4. The motorcycle of claim 1 wherein the drive pulley is rotatably mounted to the bracket via a bearing.
5. The motorcycle of claim 4 wherein the bearing is press-fit to both the bracket and the drive pulley.
6. The motorcycle of claim 1 wherein the drive pulley comprises a plurality of teeth to engage the drive coupler.

7. The motorcycle of claim 1 further comprising an engine, wherein both the engine and the transmission are attached to the frame using vibration absorbing mounting devices.

8. The motorcycle of claim 1 further comprising a clutch slave cylinder attached to the transmission, wherein the clutch slave cylinder is positioned to maintain the engagement of the drive coupler between the output gear and the drive pulley.

9. A motorcycle comprising:

- a frame;

- a rear swing arm attached to the frame to allow the rear swing arm to pivot relative to the frame, wherein the swing arm supports a rear wheel;

- a driven pulley coupled to the rear wheel;

- a drive pulley rotatably mounted to a bracket, wherein the bracket is fixed to the frame such that a relative orientation between the drive pulley and the driven pulley is maintained through an operating pivot range of the swing arm;

- a drive belt coupling the drive pulley and the driven pulley such that a rotation of the drive pulley imparts a rotation of the driven pulley;

- a transmission output gear attached to an output of a transmission;

- a drive coupler located between, and coupled to both, the transmission output gear and the drive pulley;

- a clutch slave cylinder attached to the transmission, wherein the bracket, drive pulley, drive coupler and output gear are located between the clutch slave cylinder and the transmission such that the clutch slave cylinder helps to maintain the engagement of the drive coupler between the output gear and the drive pulley.

10. The motorcycle of claim 9 wherein the drive coupler is fabricated from a resilient compressible material.

11. The motorcycle of claim 10 wherein the resilient compressible material comprises rubber.

12. The motorcycle of claim 9 wherein the drive pulley is rotatably mounted to the bracket via a bearing.

13. The motorcycle of claim 9 further comprising an engine, wherein both the engine and the transmission are attached to the frame using vibration absorbing mounting devices.

14. A motorcycle drive assembly comprising:

a drive pulley rotatably mounted to a bracket via a bearing, wherein the bracket is adapted to be attached to a frame of a motorcycle;

an output gear for attachment to an output shaft of a transmission; and

a drive coupler located between, and coupled to both the output gear and the drive pulley, the drive coupler is fabricated from a resilient compressible material to absorb rotational slap between the drive pulley and the output gear.

15. The motorcycle drive assembly of claim 14 further comprising a clutch slave cylinder attachable to a transmission of the motorcycle, wherein the bracket, drive pulley, drive coupler and output gear are located between the clutch slave cylinder and the transmission such that the clutch slave cylinder helps to maintain the engagement of the drive coupler between the output gear and the drive pulley.